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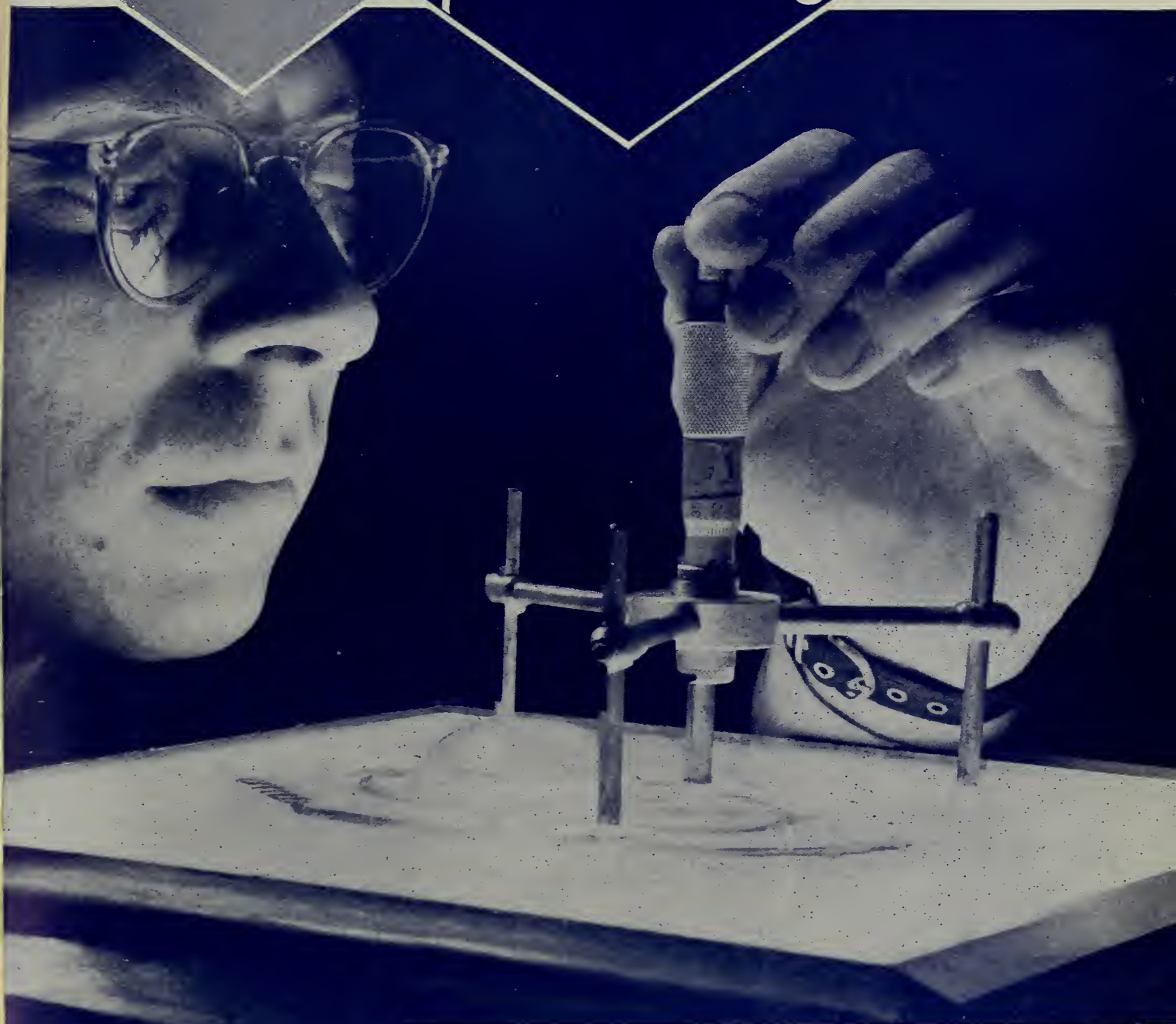
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agricultural marketing

MAY 1958



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- Coming—new egg quality control program?

AGRICULTURAL MARKETING SERVICE
UNITED STATES DEPARTMENT OF AGRICULTURE

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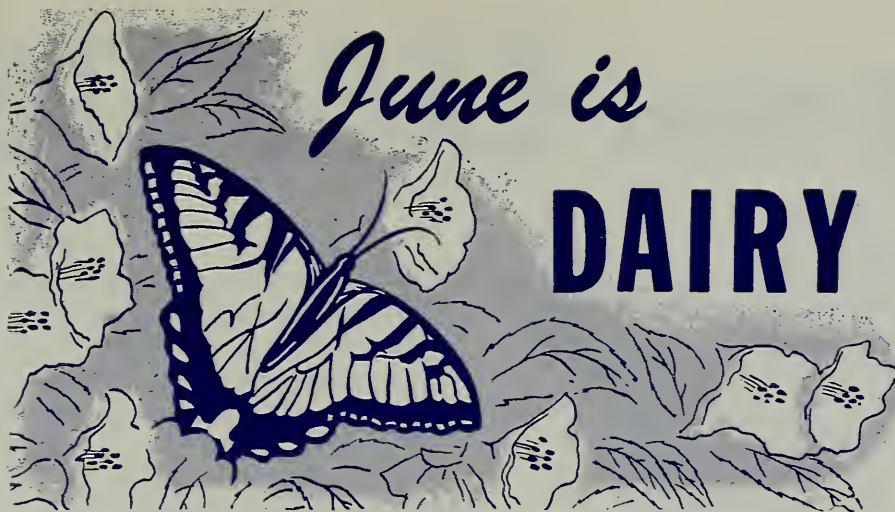
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Editor, Milton Hoffman

Assistant editor, Jeanne Starr Park

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by MARILYN K. DICKSON

THE slogan, "All Over America, June's Best Buys Are Dairy Foods," will be all over America by June—in one of the food industry's biggest promotional and merchandising drives.

These nine words, battle cry of dairymen's 1958 "June Is Dairy Month" campaign, will appear on dairy cases in food stores, on table tents in restaurants, in newspapers, on the sides of trucks, and on the air, via radio and television.

Spearheading all this activity in favor of dairy products is the American Dairy Association, promotional and advertising arm of the Nation's dairy farmers. Behind the campaign are 13 dairy organizations representing the industry from the farmer to the retailer, 5 major corporations, and—because of the plentiful supplies of dairy products—the U. S. Department of Agriculture.

Dairy month advertising will be seen in newspapers and magazines, heard on radio, and televised on the Perry Como show. The dairy industry will channel stories, recipes, and

pictures of dairy products to writers and broadcasters.

To help food retailers cash in on the promotion, the industry has made available such merchandising aids as store banners, display cards, and newspaper advertising mats.

Tying into ADA advertising, some manufacturers of soup, aluminum wrap, maple syrup, biscuit mix, and pudding mix will advertise dairy recipes that call for their own products as well. ADA advertising also will feature these recipes.

Dairy farmers in local markets, the State units of ADA, and the individual distributors and processors will push State and local June Dairy Month programs to help spark sales of dairy products. Festivities traditionally include Dairy Princesses, Dairy Days, Dairy Breakfasts, proclamations by mayors and governors, recipe booklets delivered along with milk, and prizes to waitresses who suggest a glass of milk to patrons.

Through its Special Plentiful Foods Program on Dairy Products, the U.S. Department of Agriculture will provide fact sheets, bulletins, a television spot announcement, and other infor-

mational material on dairy products for writers and broadcasters throughout the country. AMS marketing specialists now are working with retailers, restaurateurs, and others of the food trades who want to participate in this nationwide drive to sell more dairy products.

Mr. X, the consumer, will read in newspapers and magazines and hear over the air of the abundance of dairy products, their goodness, and high food value. He probably will be vividly aware that "June Is Dairy Month" before he reaches his local food store.

There, Mr. X is likely to encounter a "June Is Dairy Month" sign. If Mr. X eats out, he is likely to see a table tent advertising a dairy special. Then, when Mr. X buys a carton of cottage cheese or orders a dish of ice cream—the "June Is Dairy Month" campaign has come full circle.

Mrs. Dickson is an information specialist in AMS.



What EXPORTS



AGRICULTURAL exports mean money in the pockets of American farmers.

Last year exports soared to a record value of \$4.7 billion. The equivalent of the production of 61 million acres, or 1 out of every 5 acres of United States cropland, moved into export. The amount produced and exported was enough to fill 800,000 freight cars and 3,600 cargo ships. It required financing, inland transportation, storage and ocean transportation for 36 million tons of cargo and made up more than one-fifth of the agricultural exports of all the world.

It isn't hard to visualize the effect upon American farm income of this vast movement of farm products to foreign markets. Or what might have been the effect if there had been no such movement.

Twelve cents of each dollar received from farm marketing came from exports. But that doesn't really tell the story. Far more than 12 cents of the marketing income of many farmers came from exports.

In the case of wheat, cotton, and rice the equivalent of about half of the U.S. production of those crops went abroad last year. The equivalent of one-half of U.S. tallow, one-third of tobacco, and one-fifth of lard production was exported.

But the benefit from agricultural exports can't be measured by dividing among American farmers the cash proceeds from commodities sold abroad. It is much farther reaching than that.

Suppose agricultural exports had been much smaller than they were. What would have been the effect upon our agricultural economy?

The author is Head of the Current Information Branch of Foreign Agricultural Service.



Mean to U. S. AGRICULTURE

by QUINCY EWING

The answer is simple: Agricultural surpluses would have piled higher, and prices of farm products would have sagged. This would have been the result because, even though the great bulk of U.S. farm production is consumed domestically, the domestic market can't take it all. This is becoming increasingly true as productivity increases with technological advancement.

The importance of the export market is reflected in the fact that of the \$10.5 billion of agricultural exports moved out of CCC inventory and into use during the past 4 fiscal years, about \$7 billion of exports went to foreign consumers. The CCC investment was reduced in 1956-57 by almost \$1 billion.

Since the foreign market is such an essential part of the total market for U.S. farm products, expansion of sales abroad is being pushed in a variety of ways.

Progress is being made in this direction. The value of U.S. farm exports was 68 percent higher last year than in 1953, and actual volume of farm products moving abroad was nearly double that in 1953.

This year's agricultural exports may not be quite as high, but will still be near an all-time record.

How has this been done?

Two approaches have been taken in expanding U.S. agricultural exports. First, many things have been done to move more products into the world market, with payment in dollars. Selling for dollars is a paramount objective because it is the traditional American way of doing business. Second, special government programs have been set up to supply surplus farm products to foreign consumers who are short of dollar currency.

Last year, 60 percent of our agri-

cultural exports was sold for dollars. The valuation total of \$2.8 billion was the second highest amount since World War II. The other 40 percent, valued at \$1.9 billion, moved under special government programs. These programs provided principally for sales for foreign currencies, barter, and foreign relief donations.

Sales for foreign currency made possible U.S. agricultural exports last year to many less industrialized countries which are not able to export enough themselves to earn needed dollars. Farm products valued at about \$900 million were shipped abroad in this way under Title I of Public Law 480.

Under the barter program, over 630 million dollars worth of U.S. farm products were exchanged for foreign strategic materials. Relief donations amounting to over a quarter of a billion dollars went to foreign people who either were needy or victims of disaster.

Competitive pricing is a major tool in the Department's export promotion kit. Cotton furnishes a good illustration. Cotton exports had dropped to 2.2 million running bales 2 years ago, one of the lowest levels in history. When cotton was priced competitively, a total of 7.6 million bales was exported, the highest amount in 25 years.

In all Departmental export expansion efforts, the cooperation of private trade is an indispensable factor. This cooperation means teamwork.

The agricultural attaches and other USDA representatives work continuously with private trade and farm groups in turning up agricultural selling opportunities abroad. The attaches and other government representatives strive to bring about a lowering of trade barriers to U.S.

farm products abroad. Such barriers include tariffs, import quotas, and other restrictions. The attaches, constituting a world-wide agricultural intelligence service, constantly report developments abroad affecting demand for, and competition with, U.S. farm products.

But it is private trade which actually makes the sale. Private trade "carries the ball" behind the blocking of agricultural attaches and the Department's foreign marketing specialists. They also cooperate by carrying on promotional programs designed to increase the use of U.S. farm products in foreign countries, and by participating in U.S. agricultural exhibits in International Trade Fairs.

Another important tool is the Reciprocal Trade Agreement program under which the United States and other participating countries extend mutually advantageous tariff concessions to each other's products.

Countries with dwindling gold and dollar reserves naturally have an inclination to buy from nondollar countries rather than from the United States. The Trade Agreements program, therefore, is one of U.S. agriculture's strongest assurances that other countries will not take hasty action to restrict agricultural imports from the United States.

A high level of commercial trade has been achieved by American agriculture within the framework of the Trade Agreements program. Nearly four-fifths of U.S. agricultural exports go to Trade Agreement countries, and nearly two-thirds of such exports move under concessions obtained by the United States under trade agreements. Nine-tenths of U.S. soybean exports and four-fifths of U.S. cotton exports moved under such concessions last year.



CHERRIES ARE GENERALLY SHIPPED IN A DOUBLE ROW-FACE PACK AS SHOWN HERE.

Shipping Containers for Cherries and Apricots

by JAMES B. FOUNTAIN

CHERRY and apricot growers and shippers in the Northwest are tuning up their marketing machinery to keep abreast of the ever-changing currents in today's trade channels.

Last year, growers and shippers in Washington State adopted marketing agreements in an effort to improve their returns by shipping only their better quality fruit. Now, they are taking a good hard look at their packing methods and the containers that carry their fruit.

With the help of AMS researchers they have found that it cost 97 cents for materials and labor to pack a single 15-pound box with a conventional double row-face of cherries.

The main reason for the high cost is that 300 cherries or more must be

individually selected according to size and fitted by hand into perfect alignment to form two precise layers—the double row-face. After the face is completed, the remainder of the box is filled with loose cherries of comparable size.

It takes the average worker 25 minutes to double-face and fill a box. New workers—and about 25 percent of them are new every season—are lucky to complete the pack in a half hour.

Last season direct labor and materials for a loose pack of 15 pounds of cherries cost about 40 cents, 57 cents less than the double row-face. Also cherries in the loose pack arrived in eastern markets in just as good condition as the cherries in the face-pack.

The trade, however, preferred the face-pack because of its greater sales appeal. And wholesale auction buyers

discounted the loose pack about 85 cents below the face-pack.

But, marketing specialists point out, more and more cherries are being sold outside the auction markets. So, they ask, will the auction buyers continue indefinitely to establish such a high premium for the costly double row-face pack?

Both the cherry and apricot marketing agreements provide for regulation of containers as well as the pack. If a standard size container were adopted, this would permit more economical packing operations and a more orderly marketing procedure.

At present, shipping containers of 4 different sizes are used in cherry packing plants: 10-pound, 12-pound, 15-pound, and 20-pound. On a per pound basis, the loose pack in the 20-pound box is the least expensive.

Before 1957, the Washington State apricot industry packed in 5 different types and sizes of containers. Unlidded wooden boxes carried either 26 or 28 pounds of apricots for the local trade. Field surveys revealed that the boxes were so nearly alike that they caused confusion among both dealers and consumers. The 28-pound box was more widely favored and the Marketing Agreement Committee ruled it standard for the local trade.

Apricots for eastern and midwestern markets were shipped in 12- and 14-pound lidded boxes. Preliminary observations indicated that it was cheaper to pack and ship in the 14-pound boxes.

The possible advantages of individual consumer-size packages within the shipping boxes also merit consideration. The demand for fresh fruit, particularly apricots for home canning, appears to be on the decline. Sales may be stimulated by protectively packaging riper fruit so that it tastes better as well as looks better to the consumer. Prepackaging the fruit at shipping point also might help reduce total marketing costs and deliver fruit of superior quality by eliminating repeated handling at the retail store level.

The author is a staff member of the Marketing Research Division, AMS.

MARKETING CHARGES AT LIVESTOCK AUCTIONS

by GERALD ENGELMAN
and BETTY SUE PENCE

LIVESTOCK auction markets have increased rapidly in this country since 1930. And, as they have developed, so too have developed different ways of charging for their services.

Today, charges in auction markets are levied in any one of three ways—on a per head basis, on a percentage of sales value, or by a combination of the two methods. Charges are for selling, yardage, weighing, insurance, brand inspection, and health inspection of the animals.

Of the three methods of charging, the per head fee is most generally used.

A recent study by the Market Organization and Costs Branch of AMS shows that about half of the auctions base their market fees on a straight per head basis. Most large auctions find this method best suited for their type operation.

A few auction markets use a per-head rate for the market commission, then add a charge based on a percentage of sales value to cover other auction services. About one-fifth base all their market charges on the percentage of sales value.

More than a fourth of the auctions charge commissions on the basis of sales value and cover other expenses with a per head fee.

On an average, regardless of the method of assessment, in 1955 it cost about \$2.25 a head to sell cattle through an auction market; \$1.25 per calf; 63 cents a hog; and 42 cents for each sheep or lamb.

Straight per head charges for cattle and calves varied considerably among

auction markets included in the AMS study. Cattle charges usually ranged anywhere from \$1.50 to \$2.50, and fees for marketing calves varied between \$1 and \$2. Charges for hogs and for sheep and lambs had a somewhat smaller range. About half the auctions charged between 50 and 70 cents for hogs and between 40 and 60 cents for sheep and lambs.

Comparatively few markets used the per head combination method; usually, they were in the South. No large auctions used it. When used, this method includes a per head commission fee with additional charges based on percentage of sales value.

AMS personnel noted that per head commissions for cattle generally ranged from \$1 to \$2 per head and for calves from 50 cents to \$1. An added 1 percent or less of the sales value covered other services. The per head commission for hogs and for sheep and lambs ranged from 20 to 60 cents, with 1 percent or less of sales value added for other services.

In the Northeast, a straight percentage charge generally was used for all types of livestock; in the West,

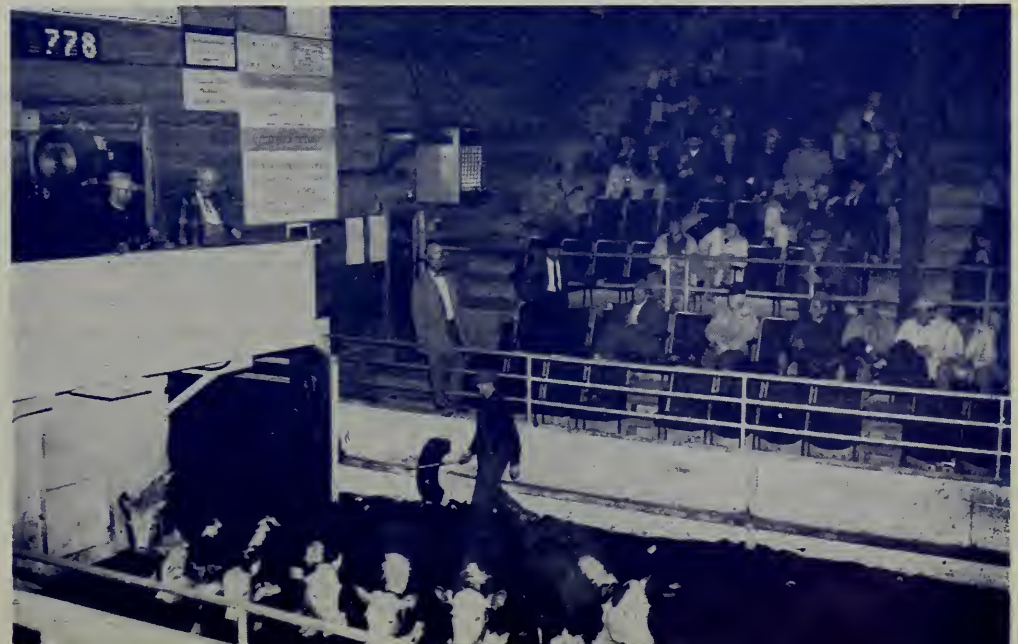
auctions used this system mainly for hogs. The charge for cattle, calves, and hogs ran about 3 percent, with 5 percent charged for sheep and lambs.

When the auction used a percentage of sales value for their market fee, with the addition of a per head charge for other services, the percentage, naturally, was lower than for the straight percentage system. The most common commissions for all livestock were 3 and 3.5 percent of sales value. The usual per head charges for other services ranged from 10 to 20 cents for cattle, calves, and hogs, and from 1 to 10 cents for sheep and lambs.

Obviously, the livestock auction operator who bases his commission on a percentage of sales value stands to gain or lose more by changes in price levels than the operator who uses a straight per head rate. If, however, the per head rate is scaled to the value of the animal, then it too will move up and down with the going prices—though probably to a lesser extent than when the percentage fee is used.

AMS researchers believe that per head charges for marketing services come closer to actual costs than charges based on a percentage of sales since handling the same species is much the same whatever the value of the animal. Also, for multiple lots, the rate and the costs per animal are usually lower.

Auction markets levy charges either on a per head basis, a percentage of the sales value, or a combination of both. On the average, it costs \$2.25 a head to sell cattle at an auction market.



Gerald Engelman is Head of the Livestock Section, MOC, Marketing Research Division, AMS. Betty Sue Pence is a member of his staff.



Coming

NEW EGG QUALITY CONTROL

by HERMON I. MILLER

CONTROL of egg quality from hen to consumer—that is the aim of marketing programs now in use by a number of egg producers and handlers.

Advances in technology—in breeding, feeding, and farm management practices—have made it possible to produce consistently high-quality eggs.

So modern poultrymen, seeking to put these eggs on the market while they are still at the peak of their quality, have developed a program to provide constant control of the two factors—temperature and humidity—which, together with rapid handling, are the most important in maintaining that quality.

To aid the industry in this quality control effort, the Poultry Division of the Agricultural Marketing Service is studying new procedures for certifying egg quality—and developing a new quality designation for eggs merchandized under controlled conditions.

This program is now being tried out in cooperation with six egg packing plants—one each in the States of Virginia, Ohio, Indiana, Mississippi, Minnesota, and Washington. These plants were chosen to represent different parts of the country so that any program finally developed would be likely to meet the needs of varying production and marketing conditions.

The experimental plan is based on two premises: that it is possible to produce high quality eggs so uni-

formly that they need not be usually candled to segregate quality—that through proper handling high quality can be maintained for a specific period of time.

The plan was made through the development of a subjective break-out test to measure quality. This method measures quality on basis of observable condition and in terms of "units," which are simply savings based on the weight and the micrometer measurement of the height of its thick (white).

Tentative basic requirements proposed Federal-State quality control program are these:

(1) Eggs must be gathered frequently—2 or 3 times a day.

(2) They must be cooled immediately to at least 60 degrees and held at that temperature with relative humidity of about 80 percent.

(3) Any cleaning or sanitizing necessary must be done in a sanitary manner.

(4) Possibly, it will be required that hens be grouped into flocks of the same age and that eggs of one flock be packed separately. This is now under study, necessary in order to maintain uniformity of the pack and to protect consumers from disqualifying flocks.

(5) Eggs must be sampled and tested by Government egg inspectors at the packing plant.

(6) Before eggs are packed, they must be inspected for blood spots. All those with blood or

Mr. Miller is Director of the Poultry Division of the Agricultural Marketing Service.



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formly that they need not be individually candled to segregate quality and that through proper handling this high quality can be maintained for a specific period of time.

The plan was made feasible through the development of an objective break-out test to measure egg quality. This method measures egg quality on basis of observable yolk condition and in terms of "Haugh units," which are simply scale readings based on the weight of an egg and the micrometer measurement of the height of its thick albumen (white).

Tentative basic requirements of the proposed Federal-State quality control program are these:

(1) Eggs must be gathered frequently—2 or 3 times a day.

(2) They must be cooled immediately to at least 60 degrees F. and held at that temperature and a relative humidity of about 70 percent.

(3) Any cleaning or shell-packing necessary must be done in a sanitary manner.

(4) Possibly, it will be required that hens be grouped into flocks of the same age and that eggs of each flock be packed separately. This provision, now under study, may be necessary in order to maintain uniformity of the pack and to prevent the loss of hens from disqualifying an entire flock.

(5) Eggs must be sampled and tested by Government egg graders at the packing plant.

(6) Before eggs are packed under the special controlled quality plan, all those with blood or meat spots,

checks, odd shapes, thin shells, stains, dirt, or other loss conditions must be removed from the lot.

(7) A "pull date" or expiration date of 7 days must be placed on egg cartons the day they are packed. Upon expiration of the 7 days, the eggs must be removed from the specially labeled cartons, either at the retail store or at the packing plant. This procedure is under study, too, to determine if it would be practical in application.

(8) Through all marketing channels, eggs must be handled properly and be transported and held at a temperature not exceeding 60 degrees F.

If all these requirements can be met, then, under the proposed plan, a laying flock may be qualified for the program in this manner: A 25-egg sample is taken at random from each flock; these eggs are broken out and scored on the basis of yolk condition and "Haugh units." At present it is proposed that the qualification standard should be 76 Haugh units, with yolks having no serious defects.

Thereafter, each delivery from this flock would be scored on the basis of a 5-egg sample taken at random from each 20 cases. However, if a producer ships only once a week, a 10-egg sample would be taken from each 20 cases. It is proposed that maintenance of a running average of 72 Haugh units be required, with no single egg falling below 55 Haugh units. No serious yolk defects would be permitted.

Eggs from a flock meeting all the requirements would remain qualified

for the quality-controlled pack as long as the 5- or 10-egg sample indicates continued compliance with requirements. Periodic checks would also be made to make sure that production, procurement, and distribution programs were being maintained in compliance with requirements.

The special USDA mark being considered for use with this program would be similar to the presently used grade shield, but would contain such wording as "Fresh Fancy Quality." Under this shield would be a statement with some such wording as "Produced and Marketed under Federal-State Quality-Control Program."

Of course there are many problems in developing and putting into operation any program of this kind. It will be studied carefully and opinions will be solicited from egg producers and handlers, State egg law officials, universities, and members of the trade.

However, if it does prove possible to work out a practical basis for providing a Federal-State labeling program such as the one under consideration—one which can be incorporated into shell egg regulations—there will be obvious advantages to the producer, the handler, the retailer, and the consumer.

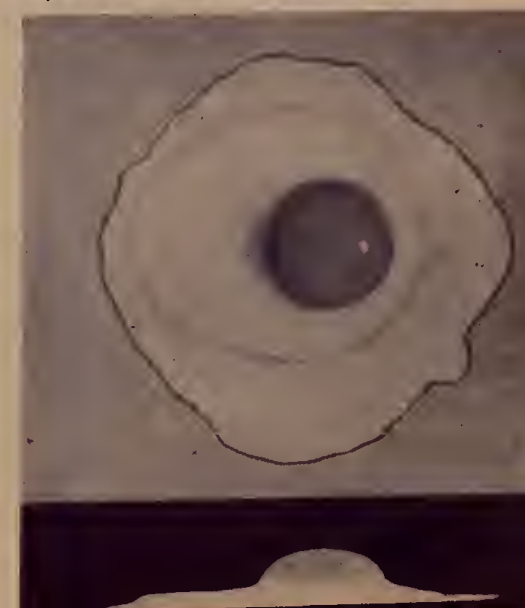
One of the most important considerations is the fact that this certification plan is based on an objective method of measuring quality, rather than a subjective method which involves the factor of human judgment. This may result in a more uniform application of a quality standard than has previously been possible.

Another advantage of the proposed program is its adaptability to the mechanized methods of egg handling which are developing so rapidly, including the systems designed to use the electronic blood spot detectors and other mechanical selection devices, once they are perfected.

The proposed program would provide a ready means of paying producers an incentive for high quality. It would, of course, also offer the same advantages as the present grade designations: a reliable quality guide for consumers and a certification of quality which can be used with confidence in long distance trade.

In developing the new certification program as an extension of the Federal-State grading service started at the request of the egg industry in the 1920's, the Poultry Division is continuing the policy of the Federal government of working with industry in the development of more efficient marketing methods.

This egg measures 72 Haugh units, which is the required average for Fresh Fancy Quality pack.



Mr. Miller is Director of the Poultry Division of the Agricultural Marketing Service.

FOOD DONATIONS TO NEEDY

This year, as it has since 1935, the U.S. Department of Agriculture is making surplus foods available to needy people through State and local welfare programs.

The following information outlines the extent of the Department's authority to make these food donations and tells how surplus commodities become available for donation. It also describes the part States and local communities play in the operation of the program.

Use of available surplus foods

Available surplus foods are being donated to any State or Territory which wants to use these foods to supplement its regular welfare program for needy people. Donations of food are also being made for use in school lunch programs and charitable institutions.

USDA processes and packages the available foods into forms suitable for institutional and home use and also pays the cost of transporting the donated foods to the States.

USDA's food donation authority

USDA has no authority to purchase food for the purpose of helping States operate welfare programs for needy people. The operation of welfare programs is not a function of the Department of Agriculture. Basic responsibility for such programs rests with State and local authorities.

The Department of Agriculture's donation of surplus foods for use by needy people and other eligible recipients is governed by specific legislation enacted by Congress.

The purpose of the Department's food donation program is to assist in the proper disposal of surplus commodities acquired through agricultural price support and stabilization or surplus-removal programs. It is the Department's desire to make full and best use of the food it acquires in a way that will help people and also recover at least part of the costs to taxpayers where that is practicable.

Price support programs

USDA acquires certain food commodities under price support programs and price stabilization operations. These commodities are held in the inventories of the Commodity Credit Corporation and are available for sale or other disposal under certain conditions prescribed by law.

Surplus removal programs

When a commodity not covered by price supports encounters serious marketing difficulties, the Department is authorized to undertake a one-time or short-term purchase program to remove the surplus from the market.

The quantity purchased under such a surplus-removal program is never more than the amount eligible recipients can effectively utilize because these are commodities that cannot be held in storage for any length of time. Many times, however, the market can be effectively stabilized with an even smaller purchase; if so, purchases are limited to that amount.

The authority for such surplus purchase and donation operations is contained in Section 32 of the Act of

August 24, 1935, as amended, and related legislation.

When limited Section 32 surplus-removal purchases are made, the quantities purchased usually are sufficient only for distribution to school lunch programs, which have the first priority on foods available for donation. In past years there have been, for example, purchases of meats, fruits and vegetables. During recent months, the Department of Agriculture has not made any sizable surplus-removal purchases under Section 32, so there are no surplus foods currently available from this source for donation to needy people.

Sales policy on CCC inventories

It is the policy of the Department to attempt to sell CCC-held commodities to the extent possible at home and abroad in order to keep losses from price support and stabilization operations to a minimum.

When CCC-held commodities cannot be sold in the domestic market, price support legislation obligates the Department to try to recover part of the CCC investment by export sales at competitive world prices or through other special sales arrangements.

Donations to eligible recipients

When CCC inventories of food commodities cannot be sold, the Department is authorized to donate them to school lunch programs and for use of needy people in charitable institutions and family units in this country. First priority is given to the food needs of the school lunch pro-

PEOPLE

gram and second priority to needy people in charitable institutions.

If the available surplus food supplies exceed the requirements of the eligible recipients in this country they may then be offered to U.S. voluntary agencies for distribution to needy people in foreign countries.

This authority to donate surplus foods for domestic and foreign welfare needs is contained in Section 416 of the Agricultural Act of 1949, as amended.

Foods now available for needy

Butter, cheese, dry milk, rice, flour, and corn meal are now being made available to States for distribution to needy families. These commodities are available in amounts that needy people can effectively utilize.

Cheese, dry milk, flour, and corn meal are now being offered to U.S. voluntary agencies for distribution to needy people in foreign countries. The quantities of rice and butter now available for donation are sufficient to meet only the needs of domestic recipients.

States determine who is needy and arrange for food distribution

In donating surplus foods for use of eligible needy people, the Department of Agriculture follows the accepted principle that the administration of welfare programs is the responsibility of States and local communities. Therefore, the Department has not established a single national standard by which the economic need of people is to be determined.

Each State establishes eligibility

standards for determining economic need, and appropriate public welfare agencies within each State certify needy people to receive surplus food on the basis of these eligibility standards.

The Department, however, requires that the eligibility standards used by each State bear a close relationship to the eligibility standards used in the State's own welfare program.

Each State makes arrangements with its counties or communities for the certification of eligible families, for the storage and handling of donated foods, and for the operation of a distribution center where certified needy people receive these foods.

Department responsibilities to prevent surplus accumulations

While the Department of Agriculture stands ready to supplement State and local welfare programs through surplus food donations, it must be recognized that one of the Department's basic responsibilities is to prevent surpluses from developing.

The Department has many programs to expand current and future domestic and export markets for food.

Domestic markets are expanded under the school lunch and special milk programs where Federal cash assistance is provided to help schools buy more food and milk through regular trade channels. The Department also helps producer groups increase sales by supporting industry-sponsored food merchandising and promotion campaigns under the Plentiful Foods Program.

Since 1954, export sales are being increased and new export markets are being developed under Public Law 480. Under Titles I and III of this law the Department operates programs which involve sales and barter—not gifts. Through this law, Congress made it possible for foreign countries to pay for U.S. agricultural imports with their own currencies. The foreign currencies being received under Public Law 480 go for many useful purposes, including the development of new U.S. export markets.

A State distributing agent checks stocks of foods in warehouse for distribution to needy persons



MISBRANDING PRODUCE

by J. J. GARDNER

AMS program stresses the advantages of compliance with the Perishable Agricultural Commodities Act rather than the penalties which may be imposed for a misbranding violation.

THE POTATO packing shed was a busy place that morning. A new lot of potatoes brought in from the fields was being run over the grading tables. On the platform, a large shipment in bags displaying official U.S. grade markings was being loaded onto trucks.

Watching the packing operations was a representative of the Fruit and Vegetable Division of Agricultural Marketing Service. He was making a spot check to see whether the potatoes complied with the U.S. grade markings on the sacks and were not in violation of the Perishable Agricultural Commodities Act.

The investigator carefully checked random samples as the potatoes moved through the shed. There was no interruption of the work, and the foreman cooperated fully. Everyone concerned knew that shipment of mis-

branded potatoes was not only a serious violation of the Act but could cause confusion and financial loss all along the chain of distribution.

In this case, as in most, the potatoes were running true to grade.

This spirit of cooperation had been fostered a few days earlier at a meeting arranged by USDA. Here, the objectives of the program were explained to local farmers and shippers, and the group discussed how careful labeling of their merchandise could contribute to higher prices, greater buyer confidence, and repeat sales.

It was emphasized that poorly graded, misbranded produce only serves to lower market prices and that a minority of careless shippers can give the entire growing area a bad reputation in the industry.

The AMS representative explained that Section 2 of the Perishable Agricultural Commodities Act makes it unlawful for any commission merchant, dealer or broker to misrepresent the character, kind, grade, quality, quantity, size, pack, weight, condition, degree of maturity, or State or country of origin of any perishable agricultural commodity received, shipped, sold or offered to be sold in interstate or foreign commerce.

When misbranding is discovered, the owners are notified and given an opportunity to mark out the incorrect grade marks or regrade the produce. They are warned of the possible penalties under the Act if violations are repeated. Persistent violators have had their PAC licenses suspended and thus were unable to conduct business in interstate or foreign commerce. Heavy penalties may be imposed for operating a business without a license.

In recent years, responsible growers and shippers have been deeply concerned with instances of misbranding and misrepresenting of produce. Most of this concern has centered around misuse of the U.S. grade designations or misbranding as to State or region of origin.

Unlike most other agricultural products, fresh fruits and vegetables

may be labeled with the U.S. grades without official inspection and certification. As a result, the PAC Act has been amended to permit the Department to make spot checks at shipping points and terminal markets. Previously, such inspections were made at the owner's request.

At the same time, the Department was given authority to examine the records of any commission merchant, dealer or broker to determine ownership and control, and the State, country or region of origin of the commodity.

The present program of spot checks has been confined to checking those lots marked with a U.S. grade or with a State or region of origin which have not previously been inspected and certified by a Federal or Federal-State inspector. In view of the hundreds of thousands of lots of fresh fruits and vegetables which are packed each year, many of which use official U.S. grade marks without inspection, no system of spot checks can be thoroughly effective.

When making spot check inspections at shipping points or at repackers' plants, the percentage of both permanent quality and condition factors (such as decay) are considered as grade defects. If inspection discloses that the percentage of scorable defects exceeds the amounts permitted in the indicated grade, the lot is considered to be misbranded.

At the wholesale terminal markets, only permanent quality factors are considered in determining whether a lot of produce was misbranded at time of packing by the shipper or repacker.

The best way to avoid possible violation of the misbranding provisions of the PAC Act, insofar as use of U.S. grades is concerned, is to secure Federal or Federal-State inspection at the time of packing. Such inspection is a protection to the shipper or repacker since an inspection certificate is evidence of compliance. It also is a protection to the buyer since it assures him that the lot has been properly marked.

The author is a member of the staff of the Regulatory Branch, Fruit and Vegetable Division, AMS.



AMS' 33 COTTON CLASSING OFFICES ARE BEING MODERNIZED. CHIEF AIM IS TO IMPROVE AND STANDARDIZE THE LIGHTING.

BETTER COTTON CLASSING THROUGH EQUIPMENT IMPROVEMENTS

by ANDREW C. ROBISON

BETTER lighting, plus controlled temperature and humidity, is resulting in greater uniformity in the Federal Government's cotton classing.

When remodeling of its offices in Raleigh, N.C., and Phoenix, Ariz., is completed this year, the Cotton Division of USDA's Agricultural Marketing Service will have completed the first part of a 6-year program to modernize its 33 classing offices.

Chief aim of the modernization program is to standardize the lighting in all cotton classing offices. The program also includes installation of temperature and humidity controls. This part of the project has been carried out in all but a few of the classing offices.

Cotton classification is the art of describing the quality of cotton in terms of grade and staple length, in accord with USDA standards. Both grade and staple length are judged

visually. This means that the quality and quantity of lighting in a cotton classing room is a matter of considerable economic importance.

In the past, the standard light source for cotton classing was a skylight oriented to shed north light. Obviously, this light source varied during different seasons of the year as well as during different parts of the day. It limited the hours that classing work could be done and even limited the portion of the room that could be used. Classing had to be done directly under the skylight.

The U.S. Department of Agriculture has long been working with commercial lighting firms to develop acceptable, standardized artificial lighting specifications for cotton classing rooms. This work started as long ago as 1919. But not until recent years has there been available a really efficient, economical lighting system which would meet the needs of the cotton classer.

The new lighting fixtures consist of four 40-watt special fluorescent tubes plus four new long-life tungsten lamps which are used with a special type of diffusing glass. These units are hung with the lower edge 10 feet above the floor in rows that are on 7-foot centers.

The fluorescent tubes were especially developed to combine daylight and blue colors. They replace a combination of three 40-watt daylight fluorescent tubes, two 20-watt blue fluorescent tubes, and four 25-watt filament lamps which were encased in mixing and reflecting chambers.

The value of the new artificial lighting system for cotton classing was graphically shown during the past winter. Weather conditions had caused an extremely late harvest in Texas and Oklahoma, and as a result some classing offices in these States had large backlogs of unclassified samples in late December. The Lubbock office, for instance, on December 27

The author is Chief of the Grading and Market News Branch of the Cotton Division, AMS.

had 255,000 samples awaiting classification under the Smith-Doxey Act. Only because this office was equipped with modern lighting was it possible to put on double shifts of classers so that by early January nearly all farmers had received their classification certificates.

In addition to lighting, two other factors contribute to uniform cotton classing: temperature and humidity.

Temperature not only affects the physical condition of the classer, which may have an effect on his work, but also affects the keeping quality of "practical forms"—the ac-

tual cotton standards against which samples are judged. Studies of cotton storage by the Division have shown that the color of cotton changes significantly under temperatures as high as 90° and 100° F. Thus a control of temperature to more moderate levels helps keep the color of the cotton standards at a more uniform level than is possible when temperature is uncontrolled.

Humidity, it has been found, has an effect on the judging of staple length. Cotton fibers are hygroscopic; that is, they pick up or lose moisture depending upon the original moisture content and relative humidity of the atmosphere.

Unless staple length types and cotton samples being classified are conditioned to a uniform humidity, misleading determinations may result.

The Cotton Division now specifies that the relative humidity of classing rooms be maintained at 58 percent, plus or minus 3 percent, and that temperature be kept at 73° F., plus or minus 2 degrees, throughout the year.

Specifications for lighting, as well as for humidity and temperature control, have been drawn up by the Cotton Division which is constantly seeking to improve the applications of U.S. cotton standards—the common language used by farmers and the industry in the marketing of cotton.

Cooling Apples and Pears in Storage Rooms

by G. F. SAINSBURY

STORAGE operators who handle apples and pears like to "room cool" their fruit. When this method is properly used, they can keep the fruit at a uniform temperature with a minimum of handling and expense.

Fruit that is "room cooled" is received, cooled, and stored all in one room. In this way, some of the problems of precooling are eliminated and there is only one handling and stacking operation.

But simple as this sounds, "room cooling" can be a complicated business. Many factors influence the effectiveness of cooling. It's often difficult to maintain uniform temperature throughout storage, and different handling procedures produce different results.

AMS handling and facilities experts have been studying the various factors that determine successful cooling of apples and pears. As a yardstick, they have developed what they call "half-cooling time." This is the

time it takes to reduce the temperature of a stored apple or pear halfway between its initial temperature and the storage air temperature.

Researchers determined half-cooling times for the more common containers and stacking arrangements. They were: 6 to 10 hours for unpacked pears in cannery lugs in individual rows and 8.6 to 18.4 hours on pallets; 6.9 to 14 hours for unpacked apples in apple boxes in individual rows and 15.4 to 23.4 hours on pallets; 23 to 36 hours for packed pears in wooden boxes in individual rows; and 27 to 50 hours for packed apples in wooden boxes in individual rows and 45 to 66 hours on pallets.

The refrigeration capacity must be adequate to keep the storage room at the lowest temperature that can be used safely during cooling. If this capacity is provided, the three most important factors that influence cooling time are the method of packing, the dimensions of the packages, and the manner of stacking.

Unpacked fruit cools more rapidly than packed fruit because the air can flow more easily through the boxes.

The distance from the center of

the pile of containers to the surface where the heat is removed is also important. Packages with three or four surfaces exposed to the air have a definite advantage over those with only one or two exposed surfaces. This can be seen in the differences in cooling fruit in pallet stacks and in individual rows.

Increased air velocity also has some effect in reducing cooling time, but as exposure becomes less, so does the effectiveness of air velocity.

An ideal storage room should hold all fruit in the room at the same temperature. Although this is not possible, it is practical to say that the average difference between the warmest and coldest fruit should not exceed 2° F.

Improperly adjusted air distribution systems are a major cause of nonuniform temperatures. Heat transmission into packages in contact with outside walls or ground floors, and variations due to poor operation of temperature control systems also produce nonuniform fruit temperature.

Air should flow parallel to the stacks rows to produce the most uniform fruit temperatures.

At the time of this research, the author was a member of the Marketing Research Division of AMS stationed at Wenatchee, Wash.

APPLE RESEARCH in the northeast

by STANLEY W. BURT

BENEFITS from AMS apple research in the Pacific Northwest are now being made available to apple packers in the Northeast.

For a number of years, Agricultural Marketing Service has sponsored apple handling and packing research in the Yakima Valley. Here, they have developed improved equipment and operating methods which have enabled Northwest packers to cut labor costs and send a better product to market.

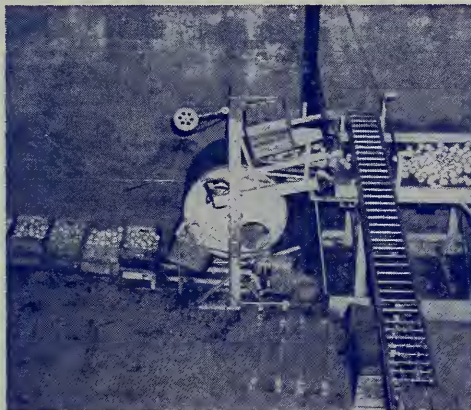
Now, some of these improvements are being applied directly to eastern packinghouses. Others are being modified or adapted to the special conditions and requirements of eastern area packers.

Apple packing plants in the East are generally smaller than in the Pacific Northwest, have lower wage rates, and dispose of much of their crop in bulk to processors. New England packers also face the added problem of handling and packing the more easily bruised McIntosh variety.

In the Appalachian area some of the packing equipment developed through research in the Northwest has already been installed. Three of these labor-saving devices are pictured at the right.

In addition, an integrated packing line with all the latest cost-reducing equipment and methods has been installed in the New York-New England area. This line will serve as a model for packers in the area. It will be tested with McIntosh apples and then revised and redesigned where necessary.

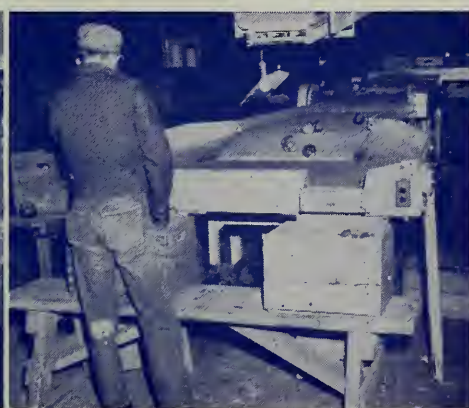
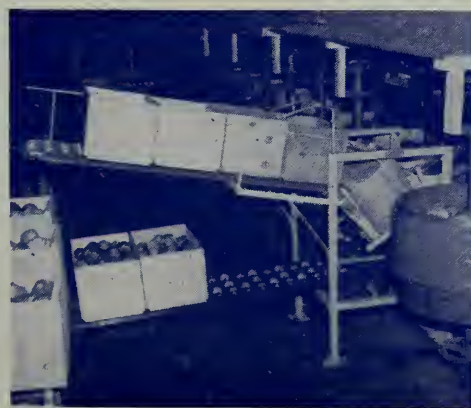
The author is a staff member of the Marketing Research Division of AMS.



Mechanical apple dumping equipment, pictured above left, requires only part time of one worker. Older, manual method at right requires two. Savings in labor can pay for dumper in one season.



Electric high piler enables one man to stack boxes 10 high, 5 boxes at a time. This contrasts with method now used which employs a gang of workers. Hand method is dangerous, costly.



AMS research also pays off for the apple packer who uses this automatic box filler. Virtually no labor is required, and device boxes fruit with less bruising and more uniformity of weight.

THE CHANGING MARKET

Cigarette consumption

Although still not back up to the high of 1952, per capita consumption of cigarettes is continuing to increase, according to AMS economists.

Ever since the moderate slump of 1954, cigarette consumption has been trending upward.

Preliminary figures for 1957 show that the per capita consumption of cigarettes is now at 3,529—up 5.7 percent over 1954. But, because manufacturers are making more cigarettes from each pound of leaf, the amount of tobacco (unstemmed equivalent) consumed per person has declined—rather coincidentally by 5.7 percent.

In figuring per capita consumption, AMS economists use an average consumption per person, *not* per user. That is, every man and woman in this country over 15 years of age is used to compute per capita figures. Since many of these are nonsmokers, the per smoker consumption is obviously much greater than the AMS data indicate. Year-by-year, these figures, however, reflect the trend in tobacco consumption.

On this same per capita basis, for instance, the number of cigars and cigarillos increased about 1½ percent from 1956 to 1957. Consumption is now almost back to the 1954 figure of 52.2 cigars and cigarillos per person.

But, as with cigarettes, the amount of leaf consumed per person in cigars and cigarillos has gone down. In this case, 9 percent.

The reason here is that more cigarillos are being smoked, and these generally require less than half as much tobacco as large cigars. Also contributing to the decline in tobacco usage has been the growing replacement of natural binders with processed binders.

Clothing expenditures

People in this country aren't spending as much of their income for clothing as they averaged 10 years ago, a recent USDA report announces. Although per capita incomes rose 20 percent between 1946 and 1956, the percentage of this income spent on clothing dropped from 9.2 to 6.2.

AMS economists think this drop in per capita clothing expenditures is due in part to our rapidly changing population. There are a lot more old people and a lot more children in this country, and both of these are low clothing spenders.

USDA surveys indicate that persons above age 60 on the average spend about the same for clothing as children in the 6 to 11 year age group and considerably below that for other adults and children 12 years of age and older.

Also, men 16 years of age and over spend about 2.5 times as much for clothing as is spent for boys from 2 to 5.

This analysis is based on a new statistical method developed by AMS which weights the age and sex of the population in determining per capita

expenditures for clothing.

From this, it appears that—all factors being equal—per capita expenditures should not change much in the next 20 years.

New food center in Philadelphia

A multimillion dollar wholesale food distribution center, now under construction in Philadelphia, is expected to save more than \$6 million a year in food handling costs.

The new center, occupying 400 acres in the southeastern part of the city, is located at a juncture of both rail and truck routes.

Soap consumption slipping

The trend toward use of more synthetic detergents and less soap continued through 1957, bringing an almost complete reversal in consumption figures for the two products in the last 10 years.

About 20 pounds of synthetic detergents were used per person in 1957 and only 8 pounds of soap. Ten years earlier, soap consumption stood at 24 pounds and synthetics at only 3.

Output of synthetic detergents in 1957 totaled 3.5 billion pounds, a rise of 14 percent in a single year. At the same time, soap production slipped to 1.4 billion pounds, down over 8 percent for the lowest output on record.

Together, soap and detergents increased their per person consumption about 2 pounds in the year between 1956 and 1957.